

RAW SEQUENCE LISTING DATE: 08/31/2000
PATENT APPLICATION: US/09/383,318A TIME: 11:01:01

Input Set : A:\sequence.txt
Output Set: N:\CRF3\08312000\I383318A.raw

4 <110> APPLICANT: Belghuith, Karima Srih
5 Mezghani, Monia
6 Ellouz, Radhouane
7 Bejar, Samir
10 <120> TITLE OF INVENTION: Polypeptides Having Glucose Isomerase
11 Activity and Nucleic Acids Encoding Same
15 <130> FILE REFERENCE: 6004.200-US
17 <140> CURRENT APPLICATION NUMBER: US 09/383,318A
18 <141> CURRENT FILING DATE: 1999-08-26
20 <150> PRIOR APPLICATION NUMBER: SN 99.100
21 <151> PRIOR FILING DATE: 1999-05-26
23 <160> NUMBER OF SEQ ID NOS: 7
25 <170> SOFTWARE: FastSEQ for Windows Version 4.0
27 <210> SEQ ID NO: 1
28 <211> LENGTH: 1546
29 <212> TYPE: DNA
30 <213> ORGANISM: Streptomyces
32 <400> SEQUENCE: 1
33 cacgagcgcc ttggtggact ggggtggacga gtccacacccg acgacgagggc ggaccctcgg 60
34 ctgctgacat cggtctctccc tctttttccc ggctcagggg ctctgacctg cggcttcacg 120
35 ctatgcccgg cctgtggggc ccgggggtgcg gaccggggccc ggcccgtttc tgcctcccg 180
36 ttcccttccc agggacgcgc tcggcatact aatttgtaaa tcgcccgtgac gaaatagtcg 240
37 caagcgagca aggagccgcg gcatgaacta ccagcccacc cccgaggaca ggttcacctt 300
38 cggcctgttg accgtcggct ggcagggggc ggaccccttc ggcgacgcca cgcgtcccgc 360
39 cctcgacccg gtcgacgtgc agcggctggc cgaactgggc gcctacggag tgaccttcca 420
40 cgacgacgac ctgatccct tcggggcgctc cgacaccgag cgcgaggcgc acgtcaagcg 480
41 gttccgtcag gcgctcgaag cgaccggcat gaccgttccg atggccacca ccaacctctt 540
42 caccaccccc gtcttcaagg caggcgcgtt caccgccaac gaccgcgcag tgcgcccgtta 600
43 cgccctgcgc aagaccatcc ggaacatcga tctcgcggtc gagctggggc ccaagggtcta 660
44 cgctgccttg ggcggccgcg agggcgcgga gtccgggtgcc gccaaaggacg tgcgtgcggc 720
45 cctggaccgc atgaaggagg ccttcgacct gctcggcgag tacgtcacct cgcagggtta 780
46 cgacatccgg ttcgccaatc agcccaagcc gaacgagccg cgcggcgaca tccgtgctgc 840
47 caccatcgcc caccgcctcg ccttcacga gcgcctggag cgcccgcagc tgtacgggtg 900
48 caacccccgag gtggggccacg agcagatggc cggcctgaac ttcccgcacg gcacgcgca 960
49 ggctctgtgg gcgggcaagc tcttcacat cgacctcaac ggccagtccg gcatcaagta 1020
50 cgaccaggac ctgcgcttcg gcgcccgtga cctgcgcgcc gccttctggc tggctcgacct 1080
51 gctggagagc gccggctggg aggggtccgc ccacttcgac ttcaagcccc cgcggaccga 1140
52 ggacatcgac ggcgtgtggg cctccgcggc cgggtgcatg cgcaactacc tgatcctgaa 1200
53 ggagcgcgcc gccgccttcc gtgccgaccc ggaggtccag gaggccctgc gtgccgcccg 1260
54 gctcgaccag ctgcgcgagc ccaccgcggc cgacggcctg caggccctgc tggccgaccg 1320
55 caccgcgtac gaggacttcg acgtggacgc ggccgcgcgc ggcatggcct tcgagcgcc 1380
56 cgaccagctc gccatggacc acctgctggg cgcgcgcggc tgaaccgggc gacgaggggg 1440
57 tacgcgcggc cgatctccct gcgtcgtcat gagggggtgc tgggcccggc gaggcggccc 1500
58 ggccccatcg tgcgtcgtct cccggggcgc ggtgtggggc gcgtgc 1546
60 <210> SEQ ID NO: 2
61 <211> LENGTH: 386
62 <212> TYPE: PRT

ENTERED

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63 <213> ORGANISM: Streptomyces

65 <400> SEQUENCE: 2

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66 Met Asn Tyr Gln Pro Thr Pro Glu Asp Arg Phe Thr Phe Gly Leu Trp
67 1 5 10 15
68 Thr Val Gly Trp Gln Gly Arg Asp Pro Phe Gly Asp Ala Thr Arg Pro
69 20 25 30
70 Ala Leu Asp Pro Val Asp Val Gln Arg Leu Ala Glu Leu Gly Ala Tyr
71 35 40 45
72 Gly Val Thr Phe His Asp Asp Asp Leu Ile Pro Phe Gly Ala Ser Asp
73 50 55 60
74 Thr Glu Arg Glu Ala His Val Lys Arg Phe Arg Gln Ala Leu Asp Ala
75 65 70 75 80
76 Thr Gly Met Thr Val Pro Met Ala Thr Thr Asn Leu Phe Thr His Pro
77 85 90 95
78 Val Phe Lys Ala Gly Ala Phe Thr Ala Asn Asp Arg Ala Val Arg Arg
79 100 105 110
80 Tyr Ala Leu Arg Lys Thr Ile Arg Asn Ile Asp Leu Ala Val Glu Leu
81 115 120 125
82 Gly Ala Lys Val Tyr Val Ala Trp Gly Gly Arg Glu Gly Ala Glu Ser
83 130 135 140
84 Gly Ala Ala Lys Asp Val Arg Ala Ala Leu Asp Arg Met Lys Glu Ala
85 145 150 155 160
86 Phe Asp Leu Leu Gly Glu Tyr Val Thr Ser Gln Gly Tyr Asp Ile Arg
87 165 170 175
88 Phe Ala Ile Glu Pro Lys Pro Asn Glu Pro Arg Gly Asp Ile Leu Leu
89 180 185 190
90 Pro Thr Ile Gly His Ala Leu Ala Phe Ile Glu Arg Leu Glu Arg Pro
91 195 200 205
92 Glu Leu Tyr Gly Val Asn Pro Glu Val Gly His Glu Gln Met Ala Gly
93 210 215 220
94 Leu Asn Phe Pro His Gly Ile Ala Gln Ala Leu Trp Ala Gly Lys Leu
95 225 230 235 240
96 Phe His Ile Asp Leu Asn Gly Gln Ser Gly Ile Lys Tyr Asp Gln Asp
97 245 250 255
98 Leu Arg Phe Gly Ala Gly Asp Leu Arg Ala Ala Phe Trp Leu Val Asp
99 260 265 270
100 Leu Leu Glu Ser Ala Gly Trp Glu Gly Pro Arg His Phe Asp Phe Lys
101 275 280 285
102 Pro Pro Arg Thr Glu Asp Ile Asp Gly Val Trp Ala Ser Ala Ala Gly
103 290 295 300
104 Cys Met Arg Asn Tyr Leu Ile Leu Lys Glu Arg Ala Ala Ala Phe Arg
105 305 310 315 320
106 Ala Asp Pro Glu Val Gln Glu Ala Leu Arg Ala Ala Arg Leu Asp Gln
107 325 330 335
108 Leu Ala Glu Pro Thr Ala Ala Asp Gly Leu Gln Ala Leu Leu Ala Asp
109 340 345 350
110 Arg Thr Ala Tyr Glu Asp Phe Asp Val Asp Ala Ala Ala Arg Gly Met
111 355 360 365
112 Ala Phe Glu Arg Leu Asp Gln Leu Ala Met Asp His Leu Leu Gly Ala

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113      370      375      380
114 Arg Gly
115 385
117 <210> SEQ ID NO: 3
118 <211> LENGTH: 13
119 <212> TYPE: PRT
120 <213> ORGANISM: Streptomyces olivochromogenes
122 <400> SEQUENCE: 3
123 Asp Gly Gly Phe Thr Ala Asn Asp Arg Asp Val Arg Arg
124 1 5 10
126 <210> SEQ ID NO: 4
127 <211> LENGTH: 13
128 <212> TYPE: PRT
129 <213> ORGANISM: Streptomyces violaceoniger
131 <400> SEQUENCE: 4
132 Asp Gly Gly Phe Thr Ala Asn Asp Arg Asp Val Arg Arg
133 1 5 10
135 <210> SEQ ID NO: 5
136 <211> LENGTH: 13
137 <212> TYPE: PRT
138 <213> ORGANISM: Actinomycetes missouriensis
140 <400> SEQUENCE: 5
141 Asp Gly Gly Phe Thr Ser Asn Asp Arg Ser Val Arg Arg
142 1 5 10
144 <210> SEQ ID NO: 6
145 <211> LENGTH: 13
146 <212> TYPE: PRT
147 <213> ORGANISM: Ampulariella sp.
149 <400> SEQUENCE: 6
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151 1 5 10
153 <210> SEQ ID NO: 7
154 <211> LENGTH: 13
155 <212> TYPE: PRT
156 <213> ORGANISM: Thermus thermophilus
158 <400> SEQUENCE: 7
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160 1 5 10

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